



GEH6500 INSTALLATION INSTRUCTIONS

Motor Operator Accessory

For TED, THED, TEC, & THEC Circuit Breakers

Description

The Motor Operator Accessory, shown installed in Figure 1, provides a means to remotely open, close, and reset a circuit breaker. In an operating installation, the customer supplies normally open ON and OFF push buttons, external wiring, a control power source, and any control circuitry.

Electrical Operation

With the breaker and the Motor Operator in the OFF position, press the ON button to energize the motor and close the breaker. When the breaker handle reaches the ON position, the control circuit is disabled by an internal limit switch.

Press the OFF button to energize the motor and open the breaker. After the handle reaches the OFF position, the control circuit is disabled by an internal limit switch.

When the circuit breaker trips automatically, there is no external trip indication unless a separate bell alarm accessory is installed to actuate a warning device. It is necessary to press the OFF button to reset the breaker before it can be closed after a trip.

Automatic Reset

An auxiliary switch is available as an accessory to automatically return the breaker to the OFF/RESET position after it has tripped. The switch is mounted inside the breaker and wired in parallel with the OFF button. When the breaker trips the switch closes, moving the breaker handle to the OFF/RESET position. After the Motor Operator

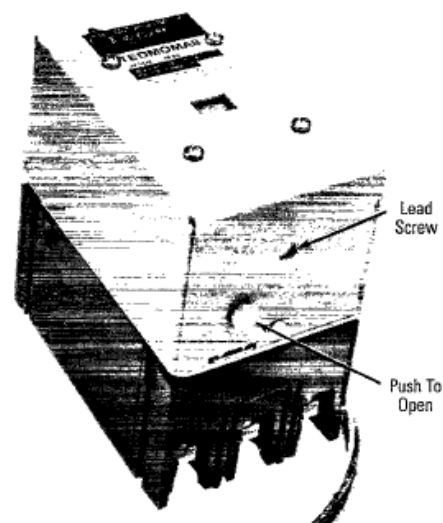


Figure 1. Motor Operator Accessory Installed on circuit breaker.

Accessory has reset the breaker, the limit switch opens the circuit. To use automatic reset, the ON push-button must be SPDT type and wired as in Figure 6. (The auto reset scheme applies to ac devices only and is not applicable for dc applications.)

Manual Operation

Push the release on the end of the Motor Operator Accessory, as shown in Figure 1, then lift the mechanism on its hinge, as in Figure 2. To return to electrical operation, align the breaker handle with the operating mechanism and close the Motor Operator.

Electrical Specifications

Table 1 lists the electrical specifications of the three models of the Motor Operator Accessory.

Catalog Number	Control			Timing (sec)		Recommended Fuse
	Volts	Inrush Amps	Running Amps	Closing	Opening Reset	
TEDMOMA1	120 Vac 125 Vdc	10.5 13.5	5.0 4.0	0.15	0.13	1 Amp Time Delay
TEDMOMA2	240 Vac	6.5	3.0			2 Amp Time Delay
TEDMOMA8	24 Vdc	31	15.5			

Table 1. Electrical specifications of the Motor Operator Accessory.

Installation



WARNING: De-energize the circuit breaker before installing the Motor Operator Accessory.

Use the following procedure to install the Motor Operator Accessory. Refer to the outline drawings in Figure 5 for dimensions.

1. Attach the Motor Operator Accessory to the circuit breaker with the four #8-32 x 3 7/8"-long screws, with spacers between the Motor Operator and the breaker, as shown in Figures 3 and 4.
2. If the circuit breaker is supported by the bus structure, fasten the Motor Operator to the breaker with the flat washer, lock washer, and nut, as shown in Figure 3. If the circuit breaker is supported from underneath, tighten the screws in the tapped holes in the supports, as shown in Figure 4.
3. Connect the line and load circuit breaker terminals.
4. Align the slide mechanism with the circuit breaker handle by rotating the lead screw assembly or by moving the handle. Close the Motor Operator on the top of the breaker.
5. Electrically test the Motor Operator per the electrical specifications. Refer to Figure 6 for the Motor Operator wiring diagram.

Parts List

Table 2 is a list of the mounting hardware included with the Motor Operator Accessory.

Part No.	Qty.	Description
N37P1506286	4	Screw, #8-32 x 3 7/8"
N405P3886	4	Lock washer, #8
791A819P4	4	Spacer
N210P1586	4	Nut, #8
N402P3886	8	Washer, plain #8

Table 2. Mounting hardware provided with the Motor Operator Accessory.

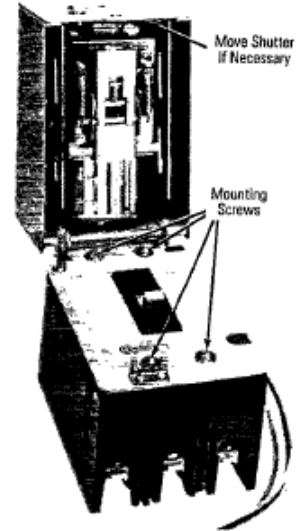


Figure 2. Motor Operator Accessory raised from circuit breaker, showing locations of mounting screws.

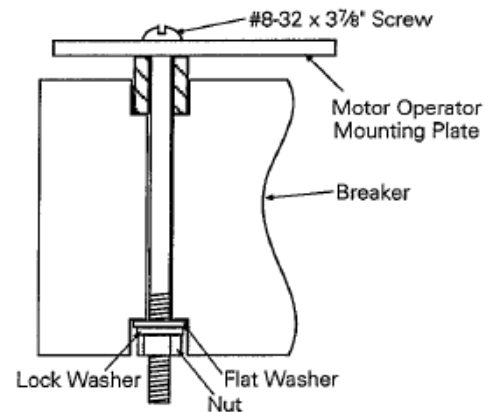


Figure 3. Motor Operator Accessory attachment to circuit breaker with breaker supported by bus structure.

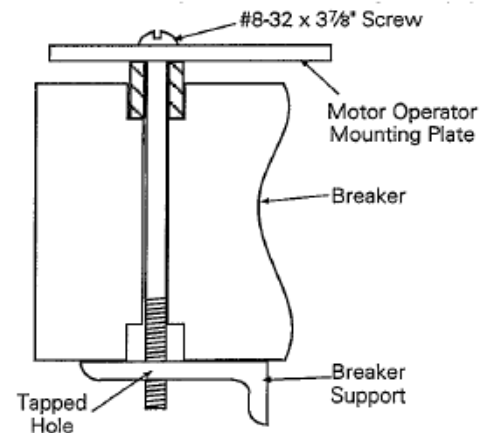


Figure 4. Motor Operator Accessory attachment to circuit breaker with breaker supported directly.

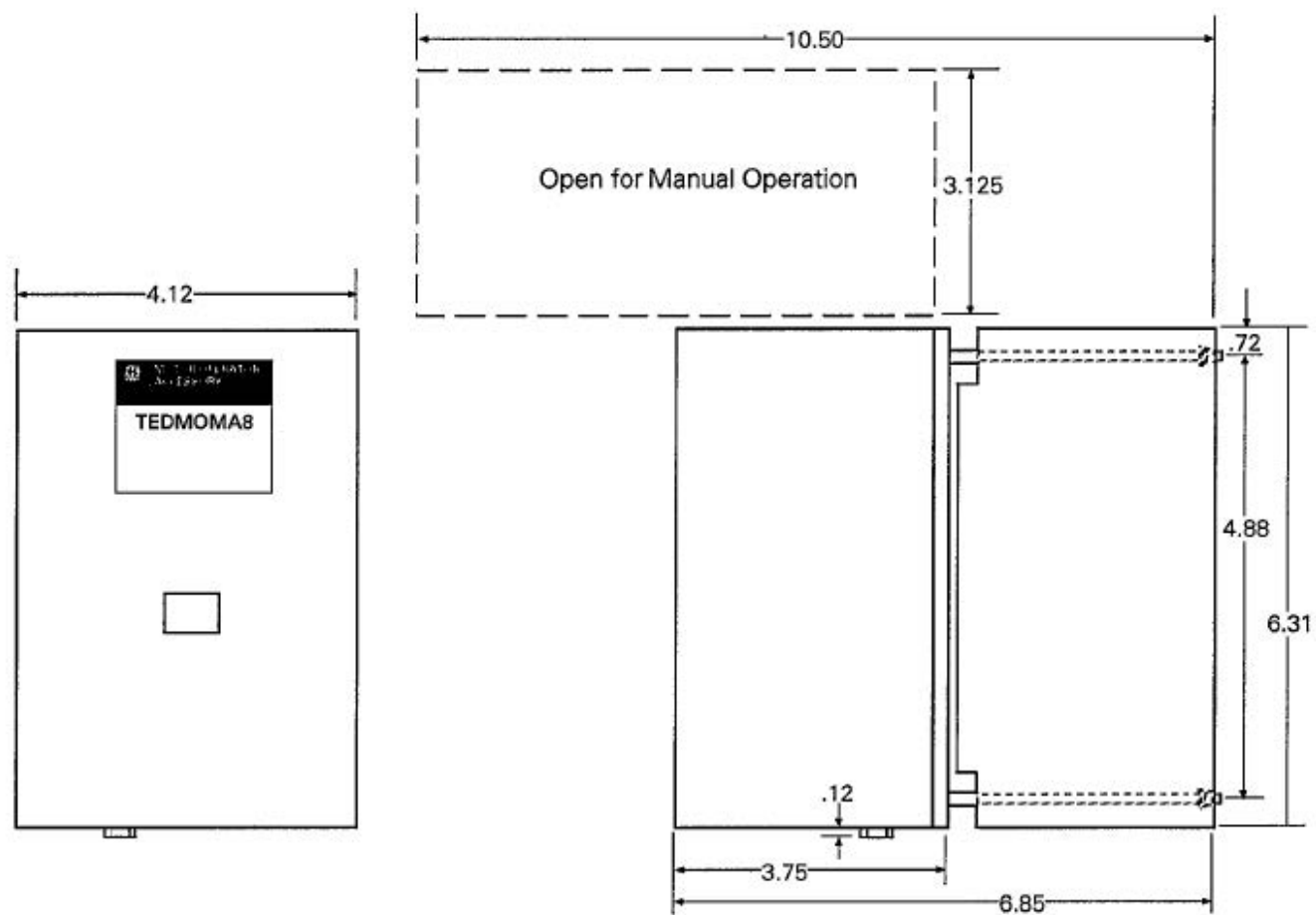
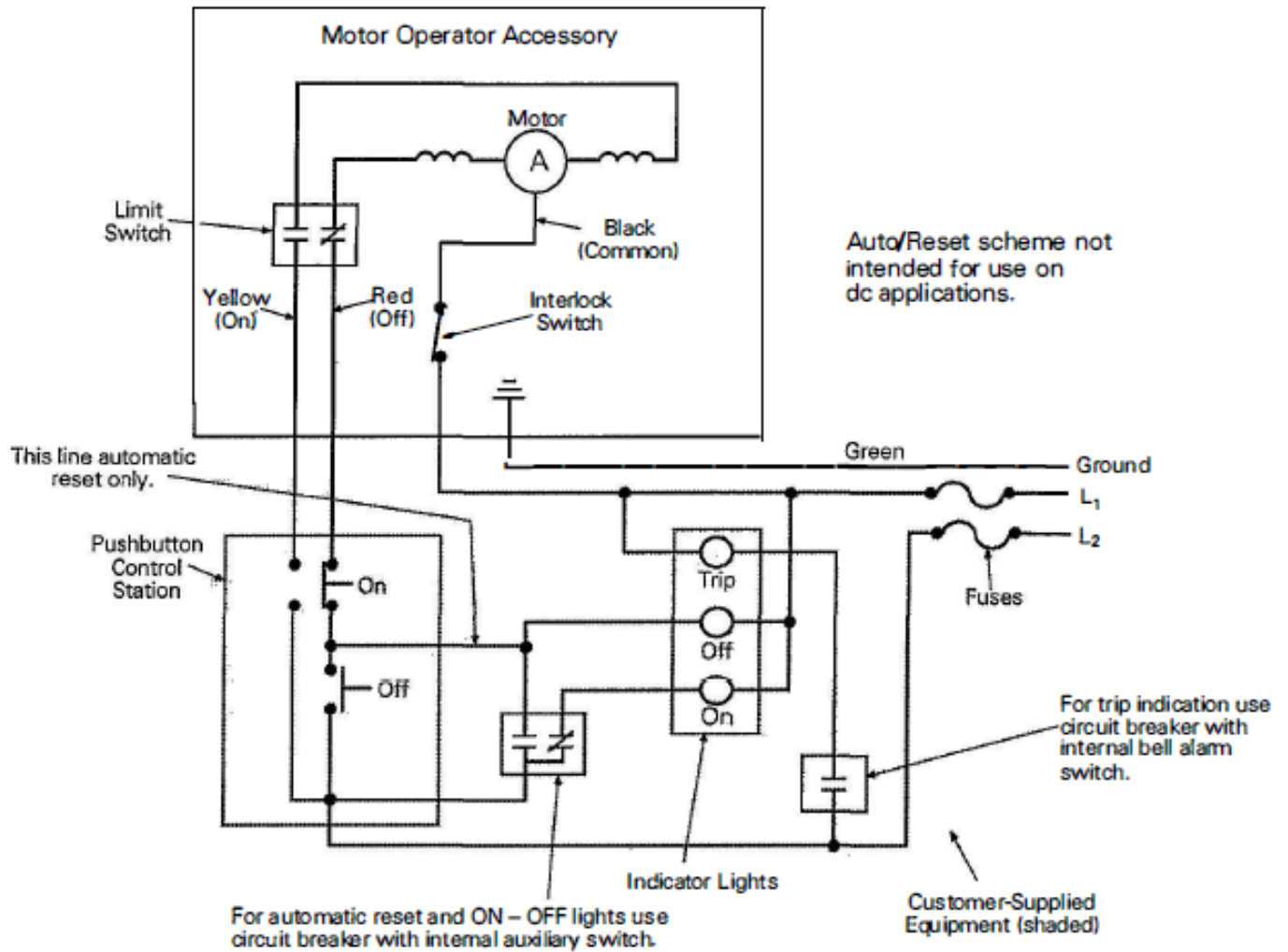


Figure 5. Outline drawings of Motor Operator Accessory attached to circuit breaker.



Note: When automatic reset is in use, the ON pushbutton must be SPDT type and must be wired as shown.

Figure 6. Wiring diagram for the Motor Operator Accessory. All switch contacts are shown with the circuit breaker in the ON position.

These instructions do not cover all details or variations in equipment nor do they provide for every possible contingency that may be met in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise that are not covered sufficiently for the purchaser's purposes, the matter should be referred to your local ABB Sales Office.